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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,134	04/01/2004	Pascal Viger	01807.101370.	8105
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EXAMINER				
SHAW, PELING ANDY				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/814,134

Applicant(s)

VIGER ET AL.

Examiner

PELING A. SHAW

Art Unit

2444

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 June 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 5-12, 15-21 and 24-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 5-12, 15-21 and 24-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB06)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. Amendment received on 06/10/2010 has been entered into record. Claims 1, 10 and 12 are amended. Claim 27 is new. Claims 1, 5-12, 15-21 and 24-27 are currently pending.
2. Applicant's submission filed on 11/19/2009 was entered. Claims 1, 10, 12, 15-21 and 25-26 were amended. Claims 2-3 and 13-14 were cancelled.
3. Amendment received on 05/01/2009 was entered into record. Amendment to the specification was reviewed and accepted. Claims 1, 10, 12, 20 and 24 were amended. Claims 4, 22-23 were cancelled. Claims 25-26 were new.

Priority

4. This application has claimed a priority on France 0304363 filed on 04/08/2003. The filing date is 04/01/2004.

Claim Rejections - 35 USC § 112, second paragraph

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 27 is rejected under 35 U.S.C. 112, second paragraph as following:

- a. Claim 27 recites the limitation of " in the event at least one distant address is obtained during the seeking step, storing in the storage means of the peer device the at least one distant address obtained during the seeking step" in lines 12-14. There is insufficient antecedent basis for this limitation in the claim. For the purpose of applying art, claim 27 is read with "in the absence of the address in the storage means of the peer device, seeking in the peer-to-peer network at least one address of a location ~~distant location~~ containing the second data items on a distance address on a distant peer device" in stead of "in the absence of the address in the storage means of the peer device, seeking in the peer-to-peer network at least one distant location containing the second data items on a distant peer device" in lines 9-11.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-12, 15-21 and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gut et al. (US 7006099 B2), hereinafter referred as Gut in view of XIAO, ET AL., "On Reliable And Scalable Peer-to-Peer Web Document Sharing," hereinafter referred as XIAO.

- a. Gut shows (claim 1) a method of access to a digital document in a communication network of the peer-to-peer type (in light of paragraphs 6-9 of applicant's published specification; column 1, lines 24-36: information shared among computers supporting web-based and other networked applications), said method being implemented in a peer device (Fig. 1, column 2, lines 29-55: a regenerative cache system includes a interface, logic element, memory and processor, request JPEG 2000 image, request document) and comprising the following steps: selecting a first data item in a digital document, the digital document comprising at least first and second data items (column 2, lines 21-28: anticipated requested objects; column 4, line 47-column 5, line 17: a object contains an object tag providing information related to the object and an object payload containing additional information related to the object, e.g. XML, CGM, FTTS, GIF, RIFF, JPEG); and before any user request for said second data item (column 5, lines 50-53: the requested object is missing from the cache if the

requested object has not been previously stored and maintained within the cache memory; column 6, lines 23-29: the requested object can be retrieved directly from the one or more remote storage devices, under any one of several situations, such as if ample communications bandwidth is available or if the pre-request contents of cache memory are to be preserved); verifying the presence of at least one address of a location containing the second data item of the digital document in storage means of the peer device (column 2, lines 21-43: determine if an anticipated requested object is missing from the cache; column 4, lines 47-51: objects stored are individually addressable by memory location, filename, virtual address map or address loop-up); in the absence of the address in the storage means of the peer device, seeking one address of location containing the second data item among a local address on said peer device (column 4, lines 47-51: objects stored are individually addressable by memory location, filename) and a distant address on a distant peer device (column 4, lines 47-51: virtual address map or address loop-up, objects stored are individually addressable by address loop-up; column 5, line 44-column 6, line 5: object obtained and cached in anticipation from external request, retrieved from one or more remote storage device); in the event of at least one address is obtained during the seeking step, storing in the storage means of the peer device the at least one address obtained during the seeking step (column 5, line 44-column 6, line 5: directory, address map); and upon reception of a subsequent request to access the second data item, download the second data of the document from one address thus stored (column 5, line 44-column 6, line 5: object from cache memory, or obtained and cached in anticipation

from external request, retrieved from one or more remote storage device). Gut does not explicitly show seeking in the peer-to-peer network at least one address.

However, Gut does show (column 1, lines 52-67) retrieving from a remotely located storage device, such as a web server.

- b. XIAO shows (Abstract) a peer-to-peer Web document sharing with local browser caches, a proxy cache, a capability to search and find in another client's browser cache before sending a further search request to an upper level proxy or a web server in an analogous art for the purpose of Reliable and Scalable Peer-to-Peer Web Document Sharing.
- c. It would have been obvious to a person of ordinary skill in the art at the time of the invention was made to modify Gut's functions of generating uncached objects from cached and stored object components with XIAO's functions of sharing documents with a local cache, a proxy cache, searching and finding document in another client's cache.
- d. The modification would have been obvious because one of ordinary skill in the art would have been motivated to explicitly specify searching and finding documents in another client's cache as per XIAO's teaching in the general art of identifying and sharing documents among computers over a network with caching functions as per XIAO (1st paragraph in Introduction) and Gut (column 2, lines 3-20)'s teaching.
- e. Regarding claim 5, Gut shows wherein the first and second data item are of the same resolution (column 11, line 56-column 12, line 3: entire full-sized, full-color, full-resolution).

- f. Regarding claim 6, Gut shows wherein the digital document is a collection comprising a list of objects (column 11, lines 6-29: one or more tiles).
- g. Regarding claim 7, Gut shows wherein the first and second data items are of different resolutions (column 11, line 56-column 12, line 3: subset of JPEG 2000 image, larger image, grayscale of color image, thumbnail, reduced-quality image).
- h. Regarding claim 8, Gut shows wherein the resolution of the first data item is less than that of the second data item (column 5, line 44-column 6, line 29: increasing resolution; column 11, line 56-column 12, line 3: subset of JPEG 2000 image, larger image, grayscale of color image, thumbnail, reduced-quality image).
- i. Regarding claim 9, Gut shows wherein the digital document comprises more than two different resolutions (column 11, line 56-column 12, line 3: subset of JPEG 2000 image, larger image, grayscale of color image, thumbnail, reduced-quality image).
- j. Regarding claim 10, Gut shows further comprising the following steps: determining the first data item consisting in a current resolution of the digital document available at the device (column 12, lines 37-51: cache first JPEG 2000 object); and before any user request for said second data item (column 5, lines 50-53: the requested object is missing from the cache if the requested object has not been previously stored and maintained within the cache memory; column 6, lines 23-29: the requested object can be retrieved directly from the one or more remote storage devices, under any one of several situations, such as if ample communications bandwidth is available or if the pre-request contents of cache memory are to be preserved); verifying the presence of at least one second address of a location containing the second data item consisting a

higher resolution of the digital document in the storage means of the peer device (column 12, line 52-column 13, line 3: request full-resolution from thumbnail); in the absence of the address in the storage means, performing the step of seeking and the step of storing (column 4, lines 47-51: objects stored are individually addressable by address loop-up); in the case of a positive search, storing the address obtained through the seeking step in the storage means of the peer device; and (column 5, line 44-column 6, line 5: directory, address map); and upon receiving a subsequent request to access the higher resolution of the document, accessing the higher resolution of the document from the address thus stored (column 5, line 44-column 6, line 5: object from cache memory, or obtained and cached in anticipation from external request, retrieved from one or more remote storage device).

- k. Regarding claim 11, Gut shows wherein the digital document belongs to the group consisting of fixed images or photographs, video sequences, and computer files of office application (column 4, line 47-column 5, line 17: a object contains an object tag providing information related to the object and an object payload containing additional information related to the object, e.g. XML, CGM, FTTS, GIF, RIFF, JPEG).
- l. Claims 12 and 15-21 are of the same scope as claims 1 and 5-11. These are rejected for the same reasons as for claims 12-22.
- m. Claim 24 is of the same scope as claim 1. It is rejected for the same reasons as for claim 1.

- n. Regarding claim 25, Gut shows wherein, when accessing the second data item of the document from one address thus stored, in the case of incomplete access, trying another address obtained through the seeking step and stored in the storage means of the device (column 6, lines 55-67: components are used and combined to form the requested object and the original components no longer stored). XIAO shows (last paragraph section 2, i.e. Browsers-Aware Proxy Server) attempting search in a browser cache, a proxy cache server and a browser index file for a object,
- o. Regarding claim 26, Gut shows wherein, when no other address is available for trying another address obtained through the seeking step and stored in the storage means of the device, again seeking a location of the second data item in the network (Fig. 5, column 7, lines 1-37: determining missing components and retrieving missing components). XIAO shows (last paragraph section 2, i.e. Browsers-Aware Proxy Server) attempting search in a browser cache, a proxy cache server and a browser index file for an object.
- p. Regarding claim 27, Gut shows a method of access to a digital document in a communication network of the peer-to-peer type (in light of paragraphs 6-9 of applicant's published specification; column 1, lines 24-36: information shared among computers supporting web-based and other networked applications), said method being implemented in a peer device (Fig. 1, column 2, lines 29-55: a regenerative cache system includes a interface, logic element, memory and processor, request JPEG 2000 image, request document) and comprising the following steps: selecting a first data item in a digital document, the digital document comprising at least first and

second data items (column 2, lines 21-28: anticipated requested objects; column 4, line 47-column 5, line 17: a object contains an object tag providing information related to the object and an object payload containing additional information related to the object, e.g. XML, CGM, FTTS, GIF, RIFF, JPEG); and before any user request for said second data item (column 5, lines 50-53: the requested object is missing from the cache if the requested object has not been previously stored and maintained within the cache memory; column 6, lines 23-29: the requested object can be retrieved directly from the one or more remote storage devices, under any one of several situations, such as if ample communications bandwidth is available or if the pre-request contents of cache memory are to be preserved); verifying the presence of at least one address of a location containing the second data item of the digital document in storage means of the peer device (column 2, lines 21-43: determine if an anticipated requested object is missing from the cache; column 4, lines 47-51: objects stored are individually addressable by memory location, filename, virtual address map or address loop-up); in the absence of the address in the storage means of the peer device, seeking at least one distant location containing the second data items on a distant peer device (column 4, lines 47-51: virtual address map or address loop-up, objects stored are individually addressable by address loop-up; column 5, line 44-column 6, line 5: object obtained and cached in anticipation from external request, retrieved from one or more remote storage device; column 6, lines 19-23: the requested object can be retrieved directly from the one or more remote storage devices regardless of the presence within the cache memory of components 60 from

which the object can be produced); in the event at least one distant address is obtained during the seeking step, storing in the storage means of the peer device the at least one distant address obtained during the seeking step (column 5, line 44-column 6, line 5: directory, address map); and upon reception of a subsequent request to access the second data item, downloading the second data item of the document from address thus stored (column 5, line 44-column 6, line 5: object from cache memory, or obtained and cached in anticipation from external request, retrieved from one or more remote storage device). XIAO shows (Abstract) a peer-to-peer Web document sharing with local browser caches, a proxy cache, a capability to search and find in another client's browser cache before sending a further search request to an upper level proxy or a web server.

Together Gut and XIAO disclosed all limitations of claims 1, 5-12, 15-21 and 24-27. Claims 1, 5-12, 15-21 and 24-27 are rejected under 35 U.S.C. 103(a).

Response to Arguments

7. Applicant's arguments filed on 06/10/2010 have been fully considered, but they are not persuasive.

- a. Applicant has amended claims 1, 10 and 12 with the limitation of "before any user request for said second data item" with support of Fig. 5, bottom of page 15 and lines 1-8 on page 17 of applicant's specification. Applicant has argued that the previous applied prior arts, particular Xiao, do not disclose this feature (see 4th paragraph on page 8 through 1st paragraph on page 9 of current amendment). Examiner has reviewed the limitation with respect the claimed invention as whole and in light of applicant's original specification and claim language, including applicant cited support. Examiner has reviewed Office Action mailed on 02/18/2010 and applied prior arts, i.e. Gut and Xiao. Examiner has searched and found that Gut and Xiao are still applicable to current claim set. In particular, Gut has disclosed (column 5, lines 50-53) the requested object is missing from the cache if the requested object has not been previously stored and maintained within the cache memory; and (column 6, lines 23-29) the requested object can be retrieved directly from the one or more remote storage devices, under any one of several situations, such as if ample communications bandwidth is available or if the pre-request contents of cache memory are to be preserved). Gut has disclosed the amended limitation. Xiao is brought in to show that caching can be used among peer-to-peer network for document sharing. Together Gut and Xiao has disclosed the claimed invention, including the newly amended limitation.

- b. Claim 27 is new with substantial similar functions of claim 1. Examiner has searched and found Gut and Xiao are applicable to claim 27. Claim rejections are updated above to reflect the amended and new claim language.

Remarks

8. The following pertaining arts are discovered and not used in this office action. Office reserves the right to use these arts in later actions.

- a. Blumberg (US 6886034 B2) Method and system for viewing scalable documents
- b. Ko et al. (US 7343555 B2) System and method for delivery of documents over a computer network
- c. Deshpande et al. (US 7260614 B2) Methods and systems for scalable streaming of images with client-side control

Conclusion

9. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Refer to the enclosed PTO-892 for details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peling A. Shaw whose telephone number is (571) 272-7968. The examiner can normally be reached on M-F 8:00 - 4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William C. Vaughn can be reached on (571) 272-3922. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Peling A Shaw/
Primary Examiner, Art Unit 2444